

US AUTOMATION EP-1



BARCODE SCANNER USER MANUAL

Table of Contents

<i>Table of Contents</i>	2
<i>Table of Figures</i>	3
<i>Introduction</i>	4
<i>Getting Started</i>	4
<i>TRG3000 Trigger Handle</i>	7
<i>Installation/Setup of the EP1</i>	7
Options Button	9
Mode Selection.....	10
Mode Menu	11
Scanning 1-D Bar Codes with the EP1	16
Scanning PDF417 (2-D) Bar Codes with the EP1	17
Pick Ticket Setup	18
Pick Ticket Setup Menu	19
Parts Bin Setup	20
Parts Bin Setup Menu.....	21
Counters Selection.....	22
Counters Menu	23
<i>Counter Explanations</i>	24
<i>What Happens When an Operator Encounters an Error?</i>	27
<i>History Options Menu</i>	28
<i>JSON History Menu</i>	29
<i>JSON History Display</i>	30
<i>Alerts Options Menu</i>	31
Alerts Menu.....	32
Edit Part Number Alert Menu	33
Alerts Setup Completed Menu	35
Part Number Alert Box	36
<i>Is Your EP1 Scanner Ready to Use?</i>	37
<i>Scanning Barcodes for the First Time</i>	37
<i>Troubleshooting</i>	38
<i>Index</i>	41

Table of Figures

FIGURE 1. OVERVIEW OF YOUR NEW EP1	5
FIGURE 2. HOW TO CHARGE YOUR EP1	6
FIGURE 3. EP1 TRG3000 TRIGGER HANDLE	7
FIGURE 4. EP1 APPLICATION STARTUP	8
FIGURE 5. OPTIONS MENU	9
FIGURE 6. MODE SELECTION	10
FIGURE 7. MODE MENU	14
FIGURE 8. PART # PICK TICKET BARCODE EXAMPLE	15
FIGURE 9. PART # PARTS BIN BARCODE EXAMPLE	15
FIGURE 10. HOW TO SCAN A 1-D BARCODE LABEL	16
FIGURE 11. HOW TO SCAN A 2-D BARCODE LABEL	17
FIGURE 12. PICK TICKET SETUP	18
FIGURE 13. PICK TICKET SETUP MENU	19
FIGURE 14. PARTS BIN SETUP	20
FIGURE 15. PARTS BIN SETUP MENU	21
FIGURE 16. COUNTERS SELECTION	22
FIGURE 17. PICK TICKET/PARTS BIN COUNTER MENU	23
FIGURE 18. PICK TICKET/PARTS BIN & JSN (DUAL OPTION) COUNTER MENUS	26
FIGURE 19. HISTORY OPTIONS MENU	28
FIGURE 20. JSN HISTORY MENU	29
FIGURE 21. JSN HISTORY DISPLAY	30
FIGURE 22. ALERTS OPTIONS MENU	31
FIGURE 23. ALERTS MENU	32
FIGURE 24. EDIT PART NUMBER ALERT MENU	33
FIGURE 25. KEYBOARD NUMBERS AND LETTERS MENUS	34
FIGURE 26. ALERTS SETUP COMPLETED MENU	35
FIGURE 27. PART NUMBER ALERT BOX	36

Introduction

Congratulations on your purchase of the US Automation EP1 Barcode Scanner. This manual refers to your new scanner as the EP1, which is based on Symbol's SPT 1700 Series scanner with an integrated Palm OS computer. This guide covers the installation/setup of the barcode scanner. All units are tested prior to being shipped and can be used upon arrival; however, it is recommended that you read this manual before operating the EP1 unit.

Getting Started

Before the US Automation EP1 scanner can begin error proofing at a job operation, you will need to do the following:

- 1.) You should become familiar with:
 - A. All the different parts of your EP1 (see figure 1).
 - B. How to charge the battery on your EP1 (see figure 2). The unit must be fully charged before beginning usage of it.
 - C. Using the trigger handle (if purchased).
- 2.) With the unit fully charged select and set a mode of operation for the EP1 (see page 8).
- 3.) Request new barcode labels be printed out at the operation where you want error proofing to be performed. The new barcode label printed must match the mode that you have selected in step 2) above. This request is made to your local IT or Flex printer support person. The EP1 works with all standard GM/EDS printers.
- 4.) When step 3) is complete and new barcode labels are being printed out at the operation, then you are ready to run the “Pick ticket setup” and the “Parts bin setup” (see page 20).

Parts of the SPT 1700

The following illustration indicates each part of the SPT 1700 Terminal.

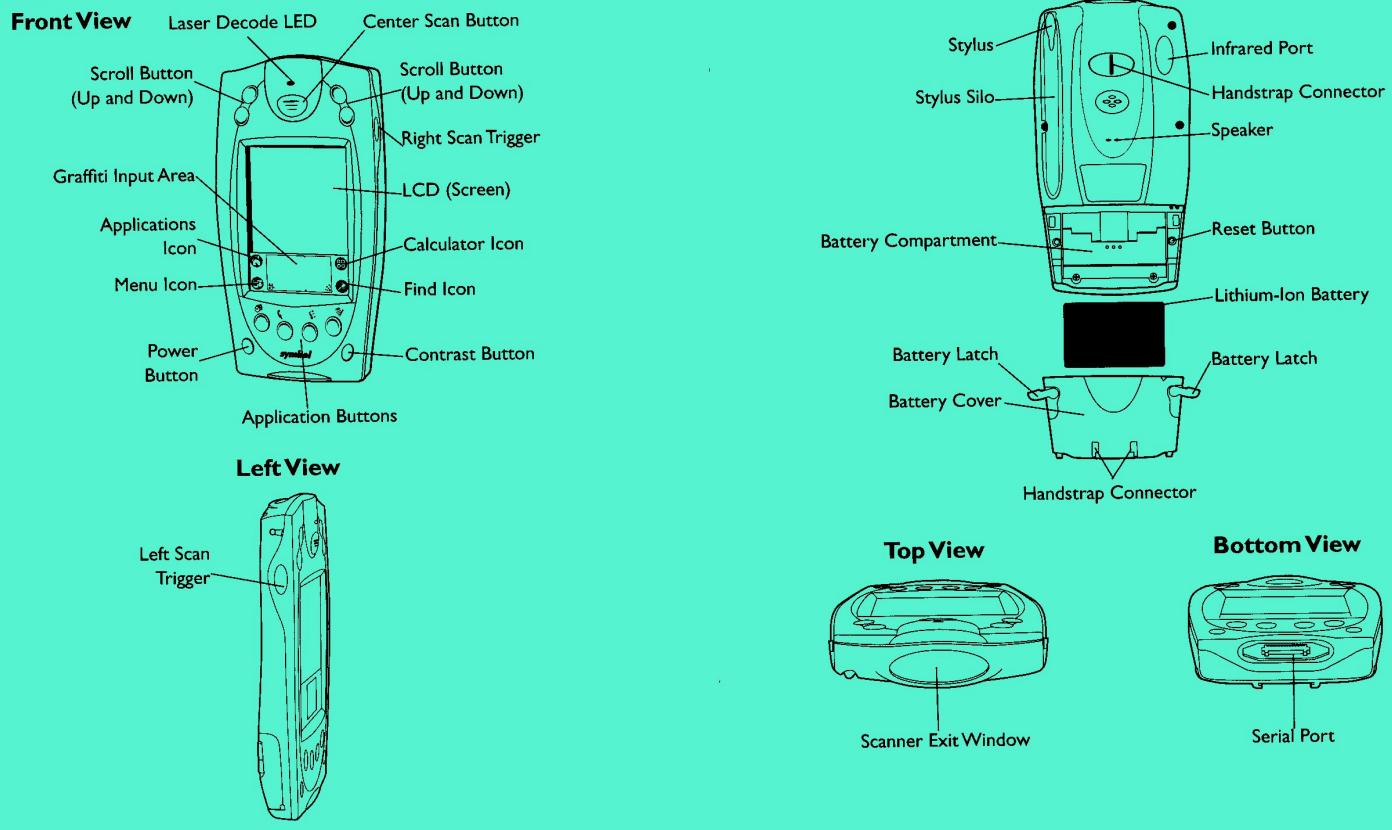
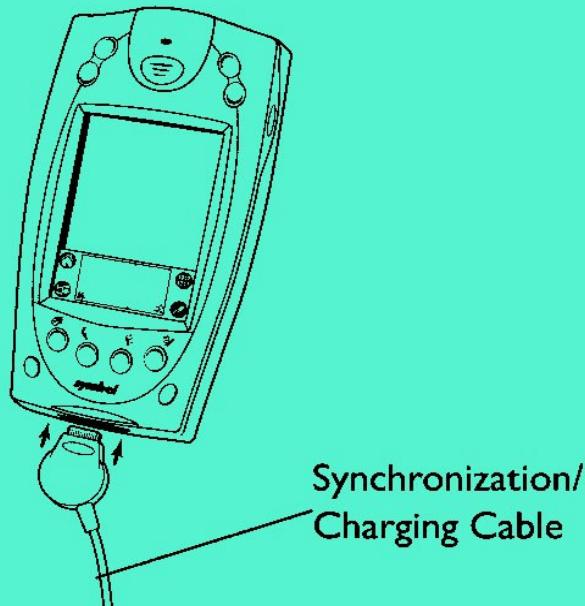
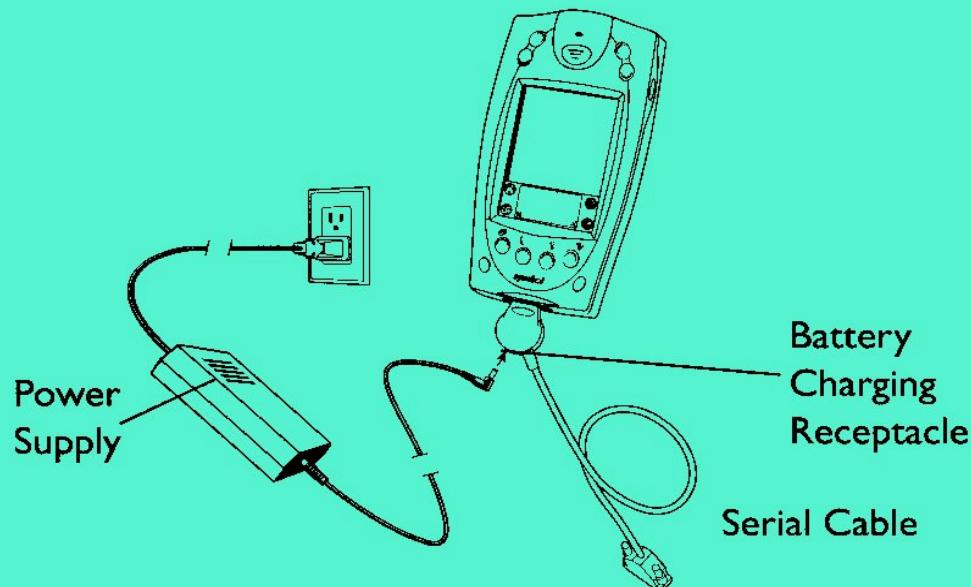


FIGURE 1. OVERVIEW OF YOUR NEW EP1

Insert the cable into the bottom of the terminal.



Plug the power cable into a wall outlet and plug the other end into the battery charging receptacle on the side of the Synchronization/Charging Cable.



The battery is fully charged after approximately two hours.

FIGURE 2. HOW TO CHARGE YOUR EP1.

TRG3000 Trigger Handle

The TRG3000 Trigger Handle adds a pistol grip with a trigger to your EP1, increasing ergonomic comfort when using the terminal in scan-intensive applications for extended periods of time.

To insert the EP1 into the trigger handle:

1. Slide the EP1 into the trigger handle until it locks into place (see figure 3).

To Remove the EP1 from the trigger handle:

2. To remove the EP1, press down the release spring and pull the EP1 forward (see figure 3).

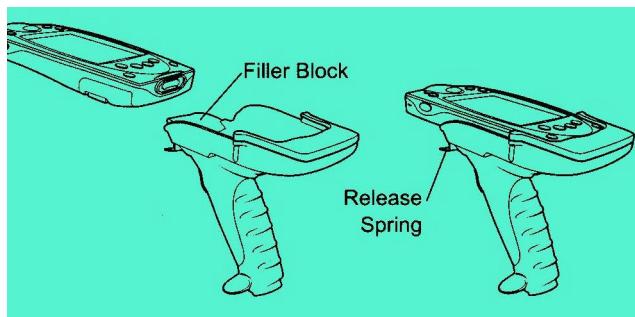


FIGURE 3. EP1 TRG3000 TRIGGER HANDLE.

Installation/Setup of the EP1

Before using your new EP1 you must scan a sample of each of the barcodes that will be used in your application. The EP1 will then build a rules set and know how to properly check the barcodes. In other words by showing samples of the barcodes that you will be using at your operation to the EP1 while it is in setup mode, you will be able teach your EP1 which type of barcodes to use when performing error proofing checks.

Start by getting samples of the barcodes that will be scanned.

The mode selected will determine how many and of which type of barcodes you need to scan.

1. Part Number mode – 2-barcode labels required (one pick ticket barcode and one parts bin label barcode).
2. Job Sequence Number mode – 1 Job Sequence Number barcode label required.
3. JSON/ Part Number mode – 2-barcode labels required (one pick ticket barcode and one parts bin label barcode).

From the main desktop, start up the EP1 application (see figure 4, item 1).

Note: Your EP1 application may not be in the same location as the picture below, but the icon will look the same.



FIGURE 4. EP1 APPLICATION STARTUP

Options Button

Then press the options button (Menu Icon) figure 5, item 1 shown below.

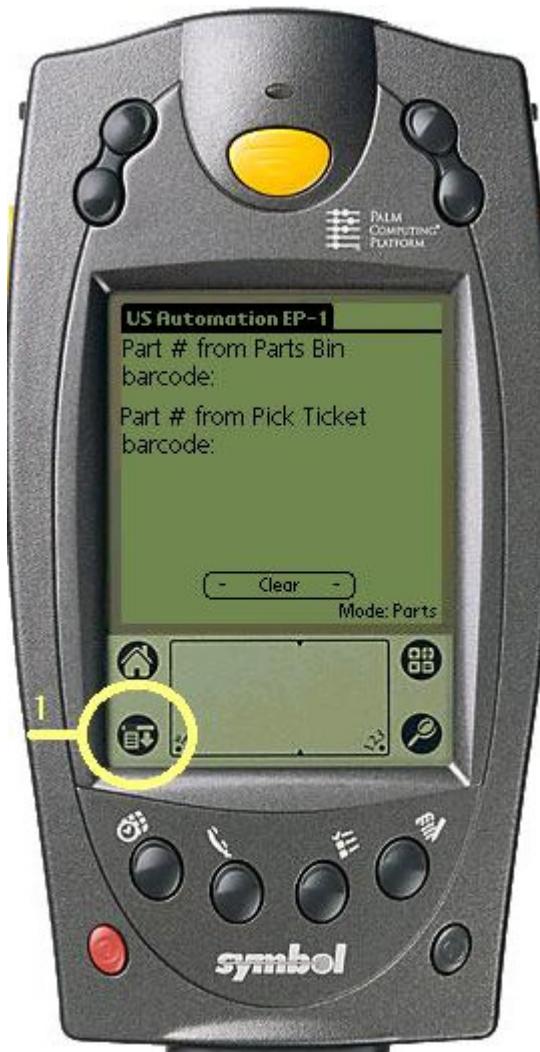


FIGURE 5. OPTIONS MENU

Mode Selection

From the Options listed, select Mode (figure 6, item 1 shown below).



FIGURE 6. MODE SELECTION

Mode Menu

The mode determines what kind of error proofing the EP1 will perform, and therefore what kind of barcode labels will be required.

From the Options listed in figure 7, select one of the following modes:

1. **Part Number** – checks to make sure part numbers match, requires 2 barcode labels one pick ticket and one parts bin label.
2. **Job Sequence Number** – checks for a valid Job Sequence Number, requires 1 barcode label with JSON only.
3. **JSON/ Part Number** – checks for a valid part number and valid Job Sequence Number, requires 2 barcode labels one pick ticket and one parts bin label.

1.) **Part Number mode:** This mode is the easiest to set up and use. This mode checks part numbers only. To use the Part Number Mode the user will scan the pick ticket and then scan a parts bin barcode and the EP1 will perform a check to make sure the part numbers match. The pick ticket can be scanned before the parts bin barcode, or the parts bin can be scanned before the pick ticket, the order doesn't matter. The EP1 is looking for pairs of barcodes.

Barcodes for the Part Number Mode can be configured in any of a number of ways. If you find you are running short on space on your pick tickets then you might want to consider reducing your part number barcode down to a subset of the original part number. For example by using only the last 4 digits of the part number you can reduce your barcode length by half. Figure 8 shows an example of a Pick Ticket barcode label where this has been done. Figure 9, item 1 is an example of a 2-dimensional Parts Bin Barcode label in the GM standard 1724A format (also known as PD417 format). Notice in figure 9, item 2 that the lower four-digits of the part number matches the number in figure 8; this is an example of a subset. The EP1 makes the assumption that you will remove the upper digits of a part number if you have to reduce the size of the barcode. To reduce the size of a barcode you must remove the upper digits first and leave the lower digits for checking. This is called a subset of the original part number. The EP1 performs a subset check automatically for you if you supply it with barcodes, which are a subset of the original full part number. For example, look at fig 8 & 9, your Parts bin barcode is 10310099 and your Pick Ticket barcode is 0099. Simply strip 1031 off your parts bin barcode and the end result is 0099. Your Pick Ticket and Parts Bin barcode numbers now match. So you can reduce a part number from an 8-digit format to a 4-digit format as long as you always remove the upper 4 digits and leave the lower 4 digits for parts matching. As a user you are responsible to make sure that you have left enough digits in place to accurately discriminate between different parts.

The following are valid barcode formats for part numbers.

Parts Bin	Pick Ticket
10020099	10020099
10020099	0099
0099	10020099
0099	0099
10020099	20099
10020099	099

As long as there is some difference between the pick ticket and parts bin barcode format, the EP1 can determine if the user has made mistakes like scanning 2 pick tickets in a row, or scanning 2 parts bins in a row, and will report any such deviation as an error. In the example shown above there are two differences between the parts bin and pick ticket barcode. One difference is that the length of the part number is not the same, and the other is that one uses a 1D format and the other a 2D format.

IMPORTANT NOTE: When choosing parts bin barcodes, the parts bin label can be either a label directly on the part from the supplier, or it can be the label on the parts bin itself. But once a barcode is chosen for error proofing, then the operator must stick with that barcode unless a decision is made to change which barcode to scan. If a decision is made to change the parts bin barcode, then the “Parts bin setup” on page 20 would have to be performed again while scanning the proper barcode label.

- 2.) **Job Sequence Number:** These labels will contain numbers that are in order. It is recommended that this mode be used mainly to double-check your work. An example would be to use the part number mode at station 1 to check the parts loaded onto a rack. When the rack arrives at station 2, a second scanner would be used to check each part for the correct Job Sequence Numbers (JSN) before shipping. A typical label will resemble figure 8 and each number scanned after the first should be in sequence or an alarm will sound.
- 3.) **JSN/Part Number:** This mode generates the most thorough checking. A pick ticket will have both a job sequence number and part number so two checks are performed at once. A pick ticket barcode label will contain a dot (a period) separating the job sequence number and part number (ex. 1234567.12345678) (JSN.PARTNUMBER).
- 4.) Each scan will then check for a part number that is different (unless you have checked the Dual JSN box) and a correct sequence number.

When you request a pick ticket barcode be printed for this mode you must request the following format:
Job Sequence Number. Part Number

The following are valid barcode formats for JSN / Part number mode.

Parts Bin	Pick Ticket
10020099	10003001.10020099
10020099	3001.0099
0099	10003001.10020099
0099	10003001.0099
10020099	10003001.20099
10020099	03001.099

NOTE: It is required that you use at least 5 digits for the JSN portion of the barcode which would be 99999 jobs before a roll over of job sequence numbers occurs.

NOTE: When using the JSN mode or the JSN/Part number, remember that there will be a JSN Error on your first scan because no previous numbers are on record. The error should not reappear unless the JSN scanned is out of order.

***Dual JSN:** Check this box if you have 2 (dual) Job Sequence Numbers (JSN). An example of a dual JSN would be a left and right side part of a car, or a front and rear bumper. This mode cannot be used with the Part Number mode. If you are error proofing Job Sequence Numbers and you have pairs of parts like a right and left door, you must check the Dual JSN option. If you don't check the Dual JSN option and scan two of the same part numbers in a row, you will receive a Back to Back Parts Bin Error or a Back to Back Part Number Error, depending on which barcode you scan.

* OPTIONAL, you should only select the item if you need it.



FIGURE 7. MODE MENU



FIGURE 8. PART # PICK TICKET BARCODE EXAMPLE



FIGURE 9. PART # PARTS BIN BARCODE EXAMPLE

Scanning 1-D Bar Codes with the EP1

The EP1 has an integrated laser bar code scanner that allows you to collect data by scanning bar codes.

To scan bar codes with the EP1:

- 1.) Start your scanning application.
- 2.) Aim the scanner at the bar code.
- 3.) Press either the right, left, center or trigger handle (if purchased) scan trigger. Make sure the red scan beam covers the entire barcode. The green scan LED lights and a beep sounds to indicate a successful decode.

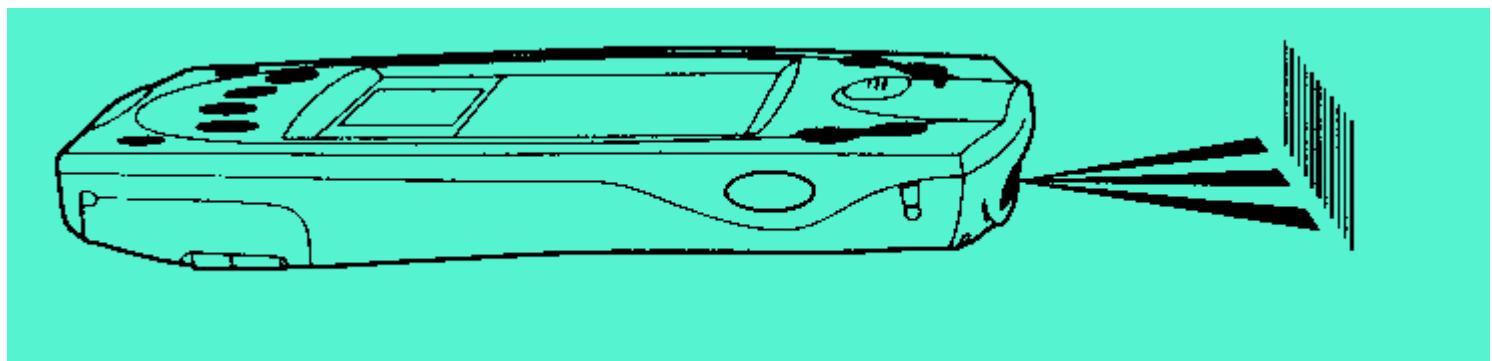


FIGURE 10. HOW TO SCAN A 1-D BARCODE LABEL.

Scanning PDF417 (2-D) Bar Codes with the EP1

The EP1 is capable of scanning 2-dimensional bar codes. To scan a 2-dimensional PDF417 bar code:

- 1.) Aim the scanner at the PDF bar code and press the trigger.
- 2.) Hold the trigger down and keep the scan line parallel to the rows of the symbol
- 3.) Manually raster the scan line by slowly moving the scanner up and down so it scans the entire barcode at a rate of one inch per second.

The PDF decode feedback should be enabled upon arrival. With this feature, a clicking noise lets you know the bar code is being decoded. If you do not hear the clicking noise when you're scanning the bar code, it's not being scanned properly.

To improve PDF decoding:

- Check that PDF417 scanning is enabled.
- Make sure the scan line extends at least $\frac{1}{2}$ " past the left and right edges of the bar code.
- Hold the scanner closer for denser symbols, farther away for larger symbols.
- Make sure you scan the top and bottom rows of the symbols.
- Be patient – it may take a few swipes to decode the symbol.

The bar code has been completely decoded when you hear a tone, followed by a short high tone beep. The green LED stays lit for two seconds or until the next trigger pull.

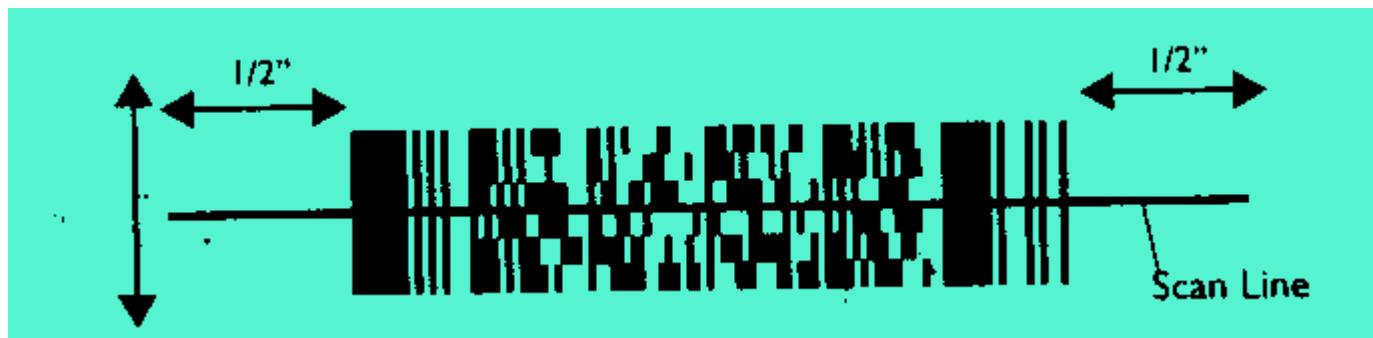


FIGURE 11. HOW TO SCAN A 2-D BARCODE LABEL.

Pick Ticket Setup

Press the Options button (Menu Icon, see figure 5, item 1).
Select the Pick Ticket Setup (figure 12, item 1 shown below).

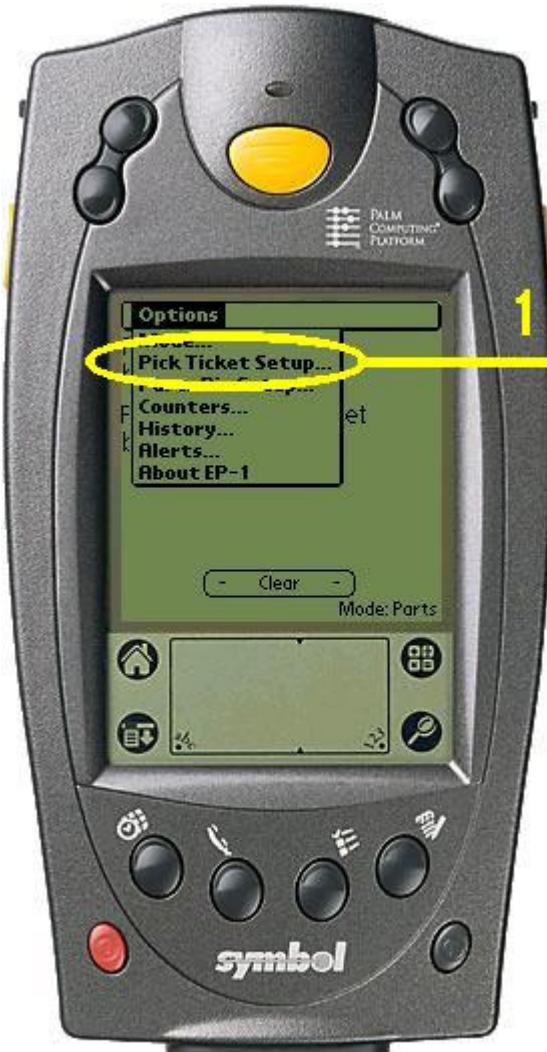


FIGURE 12. PICK TICKET SETUP

Pick Ticket Setup Menu

Press the Clr All button (see figure 13, item 1 below).

Then scan a sample pick ticket barcode by pressing the barcode scan button (see figure 13, item 2 below), and press the OK button (see figure 13, item 3 below).

Now the EP1 knows what kind of pick ticket barcode you are using.

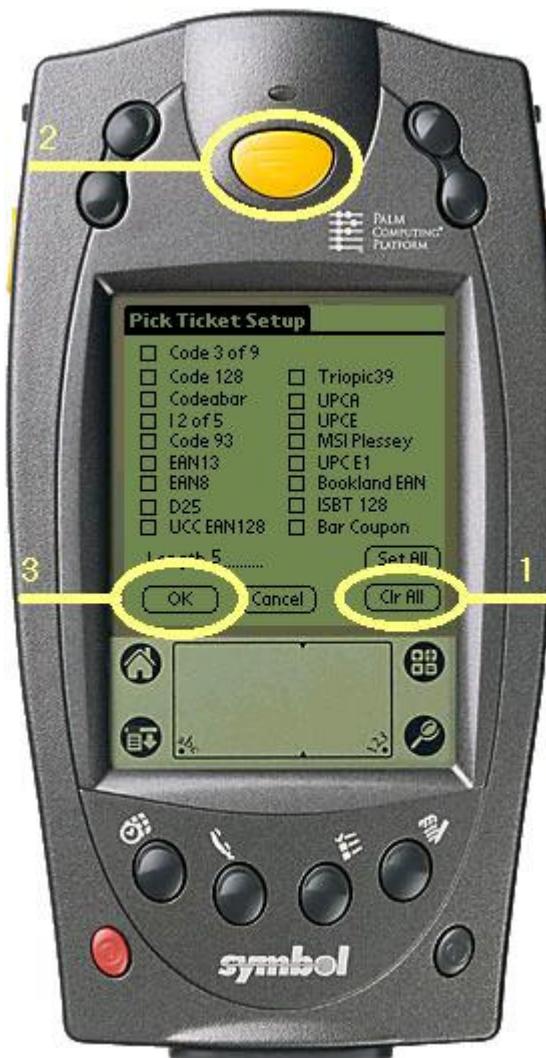


FIGURE 13. PICK TICKET SETUP MENU

Parts Bin Setup

Press the Options button (Menu Icon, see figure 5, item 1).

From the Options listed select the Parts Bin Setup (see figure 14, item 1 below).

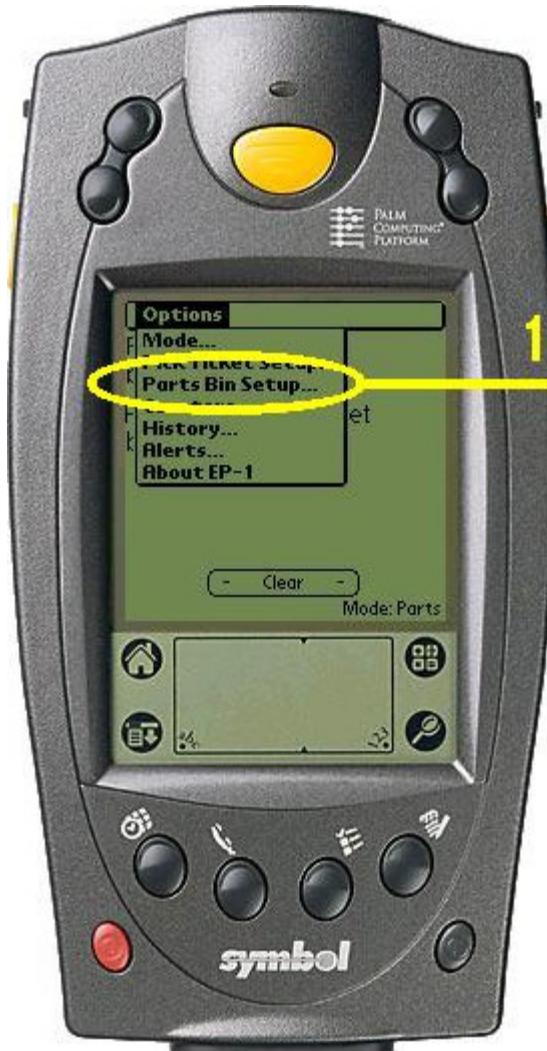


FIGURE 14. PARTS BIN SETUP

Parts Bin Setup Menu

Press the Clr All button (see figure 15, item 1 below).

Then scan a sample pick ticket barcode by pressing the barcode scan button (see figure 15, item 2 below), and press the OK button (see figure 15, item 3 below).

Now the EP1 knows what kind of parts bin barcode you are using.

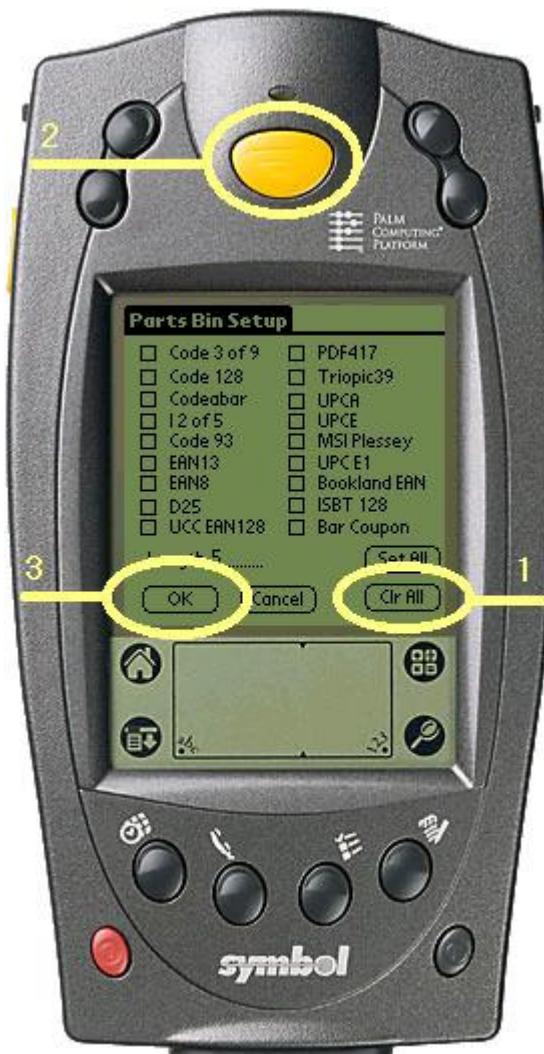


FIGURE 15. PARTS BIN SETUP MENU

Counters Selection

Press the Options button (Menu Icon, see figure 5, item 1).
From the Options listed select Counters (see figure 16, item 1 below).



FIGURE 16. COUNTERS SELECTION

Counters Menu

The Counters menu (see figures 17 & 18) allows users or supervisors to track and clear all information related to bar codes. Figure 17 & 18 (left side) show the Part Number Counter Menu. The only difference between figures 17 & 18 (left side) is shown in figure 18, item 4 (JSN button). The JSN button appears because the DUAL JSN option mode is checked. Pressing the JSN button will display the menu in figure 18 (right side) and item 7 shows the Parts Button replacing the JSN button spot.

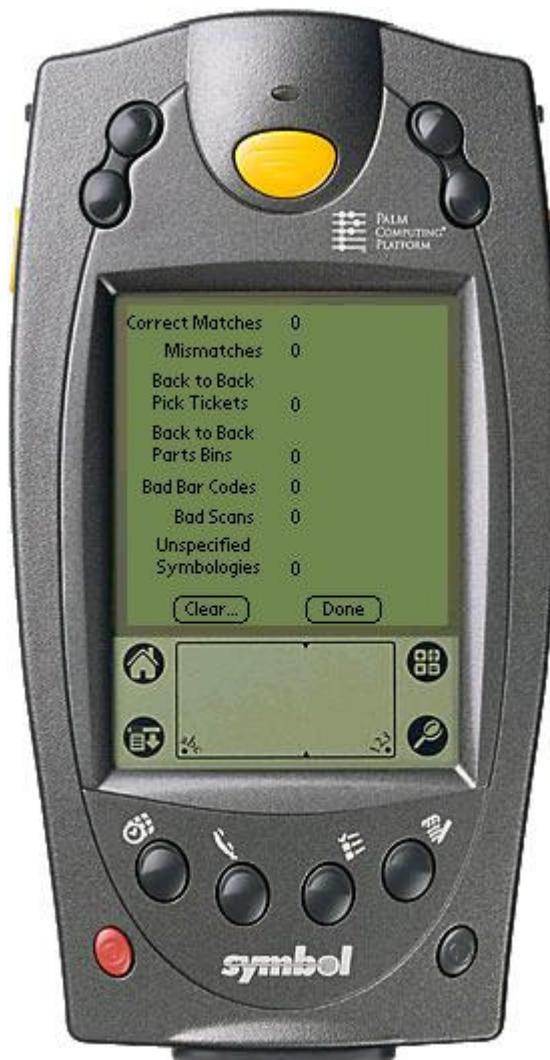


FIGURE 17. PICK TICKET/PARTS BIN COUNTER MENU

Counter Explanations

Pick Ticket / Parts Bin Counter Menu

Correct Matches:	This counter will tell how many Pick Ticket and Parts Bin barcodes were matched. This number should match real close to your actual jobs (see figure 17 or 18, item 1). No error messages will appear.
Mismatches:	This counter will tell how many Pick Ticket and Parts Bin barcodes were mismatched (see figure 17 or 18, left side). An error message is generated for every count.
Back to Back Pick Tickets:	This counter will tell how many Pick Ticket barcodes were scanned in a row (see figure 17 or 18, left side). An error message is generated for every count.
Back to Back Parts Bins:	This counter will tell how many Parts Bin barcodes were scanned in a row (see figure 17 or 18, left side). An error message is generated for every count.
Bad Bar Codes:	This counter will tell how many Bad barcodes were scanned. This type of error generates an alarm and can usually be traced back to the printer that printed the barcode (see figure 17 or 18, item 2).
Bad Scans:	This counter will tell how many Bad scans have occurred. This type of error generates an alarm and can usually be traced back to the printer that printed the barcode (see figure 17 or 18, item 3).
Unspecified Symbolologies:	This counter will tell how many barcodes were successfully scanned and the barcode format was unknown. This type of error generates an alarm because the scan was successful, but the Pick Ticket and Parts Bin options were not setup to scan the barcode that you scanned (see figure 17 or 18, left side).

JSN Counter Menu

Correct Sequences:	This counter will tell how many barcodes were successfully scanned in the correct sequence. This number should come real close to your actual number of parts scanned (see figure 18, item 5).
Sequence Errors:	This counter will tell how many barcodes were scanned out of sequence. This type of error will generate an error message (see figure 18, item 6).
Wrong Length:	This counter will tell how many barcodes of the wrong length were scanned out of sequence. This type of error will generate an error message and occurs when a barcode other than what was setup is scanned (see figure 18, right side).
Not Numeric:	This counter will tell how many barcodes were scanned and found to be not numeric. This type of error will generate an error message and occurs when a barcode other than what was setup is scanned and contains letters instead of numbers (see figure 18, right side).

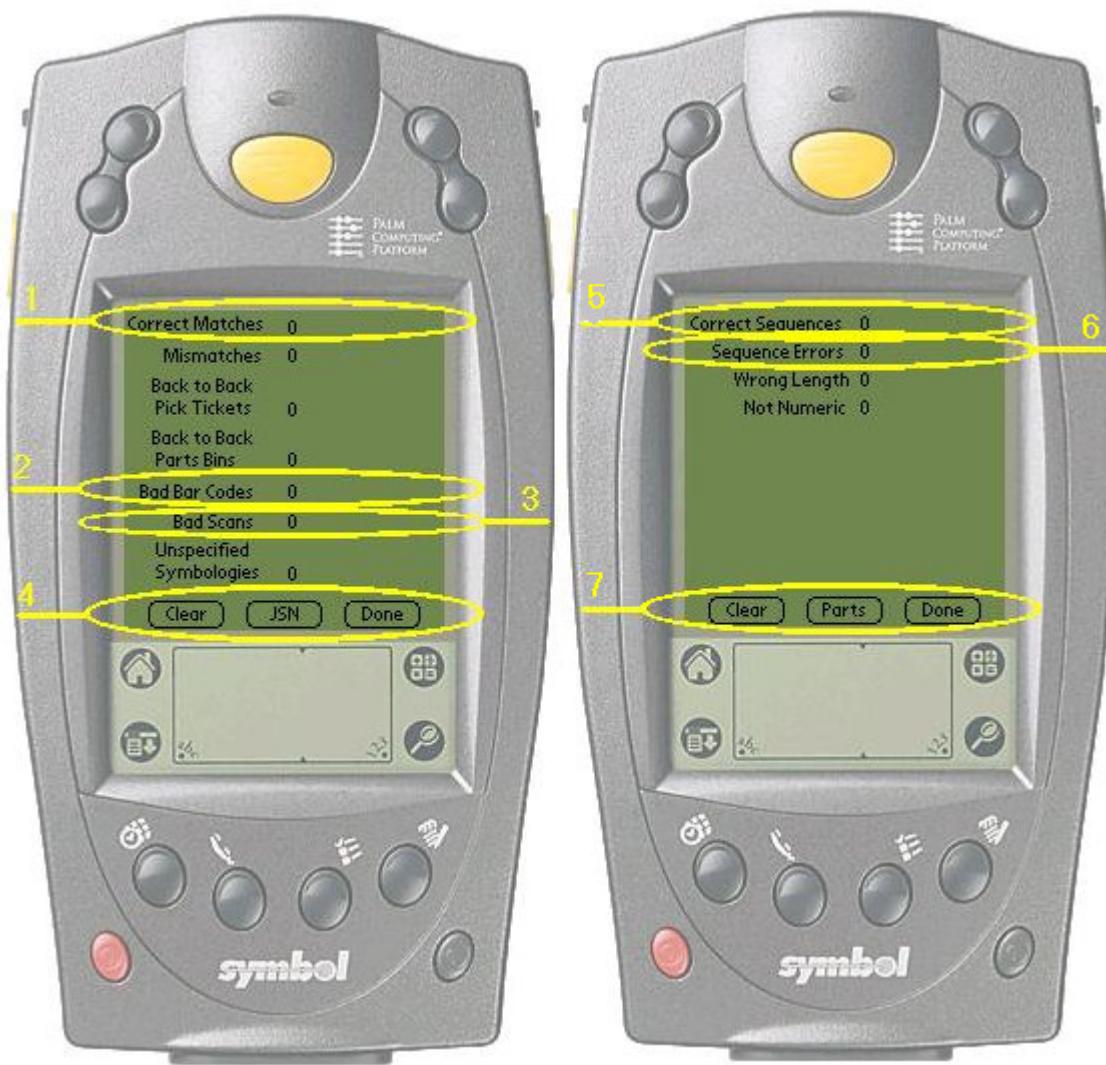


FIGURE 18. PICK TICKET/PARTS BIN & JSON (DUAL OPTION) COUNTER MENUS

What Happens When an Operator Encounters an Error?

As everyone knows even the best operator will eventually make a mistake when picking parts. The EP1 will detect an invalid part selection and report it as an error. When an error is detected by the EP1, the EP1 will display a pop up box indicating the reason for the error while sounding an audible alarm. The scanner will then be locked out from scanning (disabling any more scans) until the operator acknowledges the error by tapping on the acknowledgement button showing on the display screen of the EP1.

Counter Errors	Possible Causes and remedies
Error: Part Number Mismatch	Your pick ticket and parts bin barcodes are different, rescan your barcodes & verify that the labels are not defaced.
JSON Error: Not Numeric	The barcode scanned contains letters and is not numeric, rescan a different barcode.
JSON Error: Incorrect JSON	This error will appear on your first scan because there is no number to compare to, scan the next barcode. Check and make sure the barcodes scanned were in sequence (ex: 1000, 1001, 1002, etc.)
JSON Error: Wrong Length	Verify that the label is not defaced. Check and make sure that you are setup to scan this particular label.
Wrong Symbology: The scanned symbology is not specified in the setup form	Pick ticket setup and/or Parts bin setup have not been setup to scan the barcode in question.
Error Detected: Back to back pick ticket barcodes	2 Pick ticket barcodes were scanned in a row, rescan one pick ticket barcode and then scan the appropriate parts bin barcode.
Error Detected: Back to back Parts Bin barcodes	2 Parts bin barcodes were scanned in a row, rescan one parts bin barcode and then scan the appropriate pick ticket barcode.

History Options Menu

The History menu (see figure 19) allows users or supervisors to view the history records. The EP1 can keep a history of scan results in its local database. A history of scans will be kept if the EP1 is operated in a mode that uses a JSON for error proofing. Histories are not kept for parts mode only. At this time the history database is 32000 records in size. The database will automatically wrap around and write over the oldest records when it is full. The number of days that the unit can hold will depend upon which error proofing mode is selected by the user and by the number of production units built per day. Translated into days of production, the EP1 can hold approximately 7 – 40 days of production data. The history records detail the date, time, the JSON, and what the status of the scan was (scan error, JSON mismatch, No Scan, Part Number Match, JSON match). See Counter Error Explanations or Counter Errors for more detail on the status of the scans.

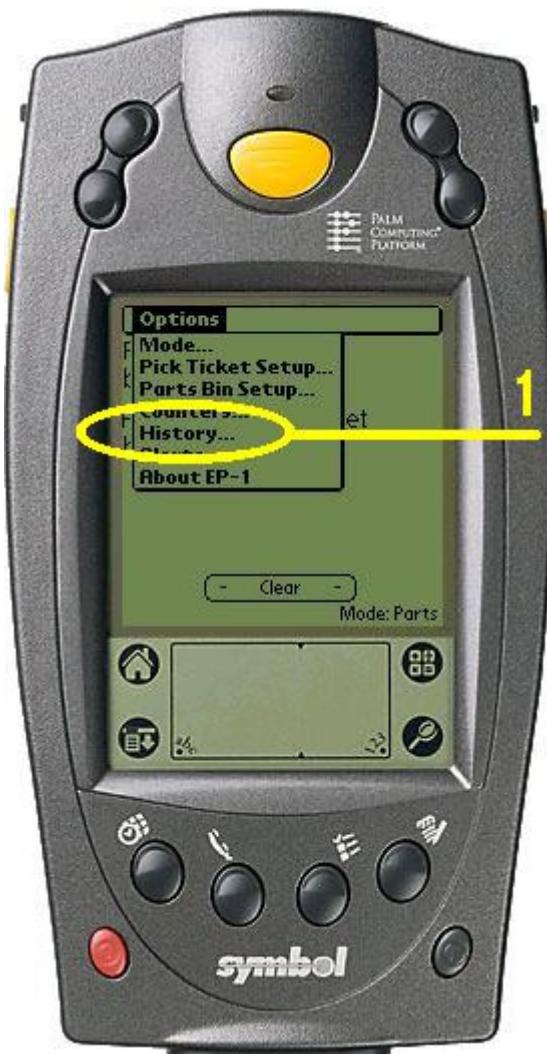


FIGURE 19. HISTORY OPTIONS MENU

JSN History Menu

The JSN History menu (see figure 20) allows users or supervisors to view the history records. Press the Display button (see item 1, Figure 20) to see a list of all the records. If you know the JSN number you want to see, use the stylus and tap on the 0 in item 2 (figure 20), then tap item 4 (figure 20) and type the JSN number. Once you see your JSN on the line in item 2, tap the Display button (item 1, figure 20). If you are finished in the History menu and want to exit, tap the done button (item 3, figure 20).

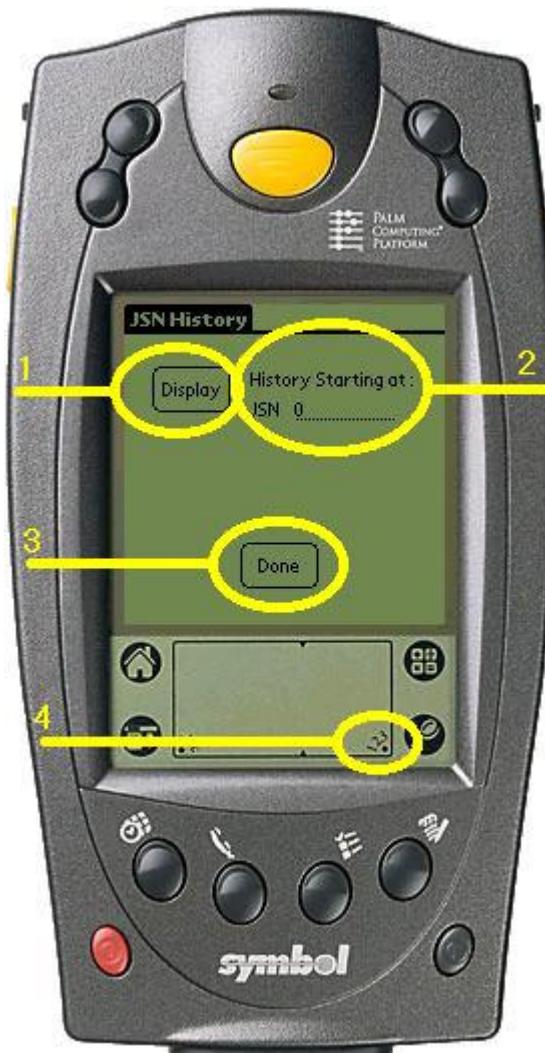


FIGURE 20. JSN HISTORY MENU

JSON History Display

The JSON History Display (see figure 21) shows the history records. In the history window you will see the Date, Time, and the JSON. When a record is highlighted, you will see what the status of that scan was (see item 1, figure 21). For example, you might see Scan Error, JSON mismatch, No Scan, Part Number Match, or JSON Match. See Counter Error Explanations or Counter Errors for more detail on the status of the scans.

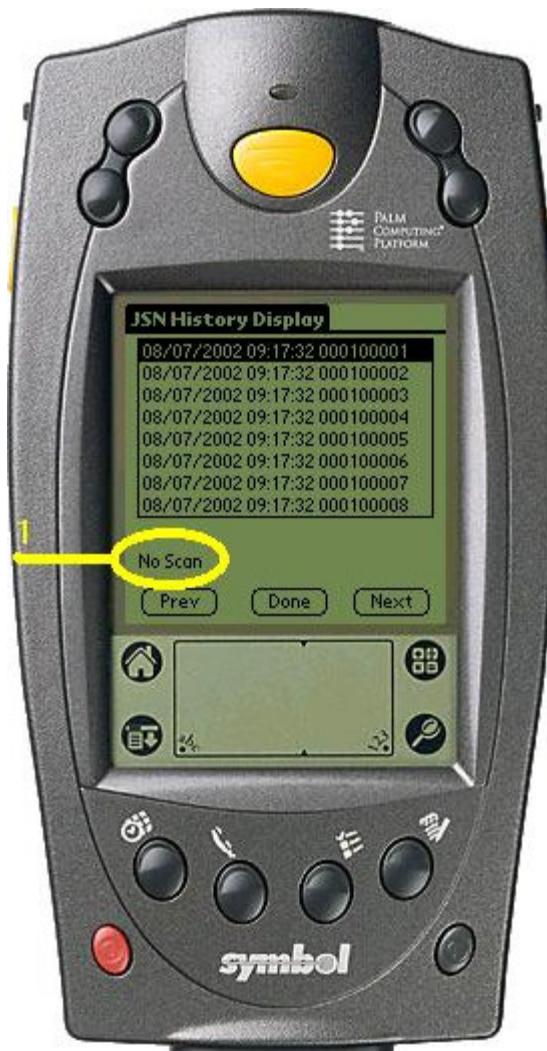


FIGURE 21. JSON HISTORY DISPLAY

Alerts Options Menu

The Alerts Options Menu (see figure 22) allows users or supervisors to setup one or more part numbers to alert them via a pop-up window containing text to warn the user that a particular part has been scanned. This feature enables users to get special notifications for part a number that requires extra attention. For example if a part number is encountered where there is an option that is rarely used, then the alert message can notify the operator to double check that part. The operation of the Alerts menu will be explained in more detail on the following pages.



FIGURE 22. ALERTS OPTIONS MENU

Alerts Menu

The Alerts Menu screen(see figure 23) shows a list of alerts that have been setup. This menu also allows users to edit alerts that have already been setup, or to add or delete alerts from the list (see Item 1, Figure 23). Figure 23 shows us that No Alerts have been setup. To set up your first alert, select the Add button with your stylus (see Item 1, Figure 23).

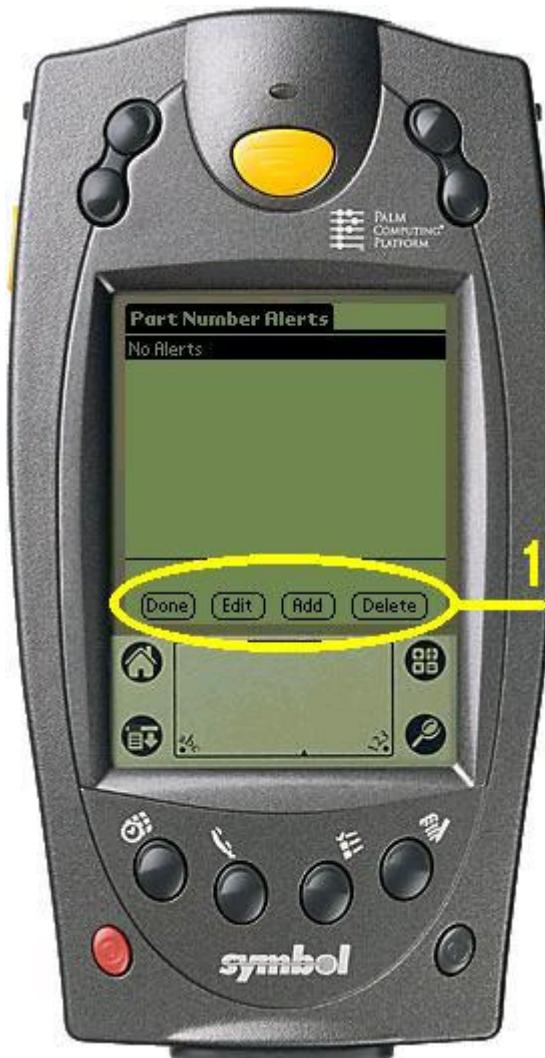


FIGURE 23. ALERTS MENU

Edit Part Number Alert Menu

The Edit Part Number Alert screen (see figure 24) allows an alert to be entered or edited. First tap the line next to the Part Number with your stylus (see item 1, figure 24). To enter the part number call up the numeric keyboard as shown on item 4, Figure 25. When entering the Parts Bin Part Number NOTE: That you must enter ALL digits of the part number. For example if it is an 8-digit part number, then enter all 8 digits. After the parts bin part number has been entered, use your stylus to tap the line below Alert Text (see item 2, Figure 24) and then call up the text keyboard (see item 3, Figure 24) to enter the alert text.

When Part Number and Alert Text are entered correctly then use your stylus to tap the OK button.

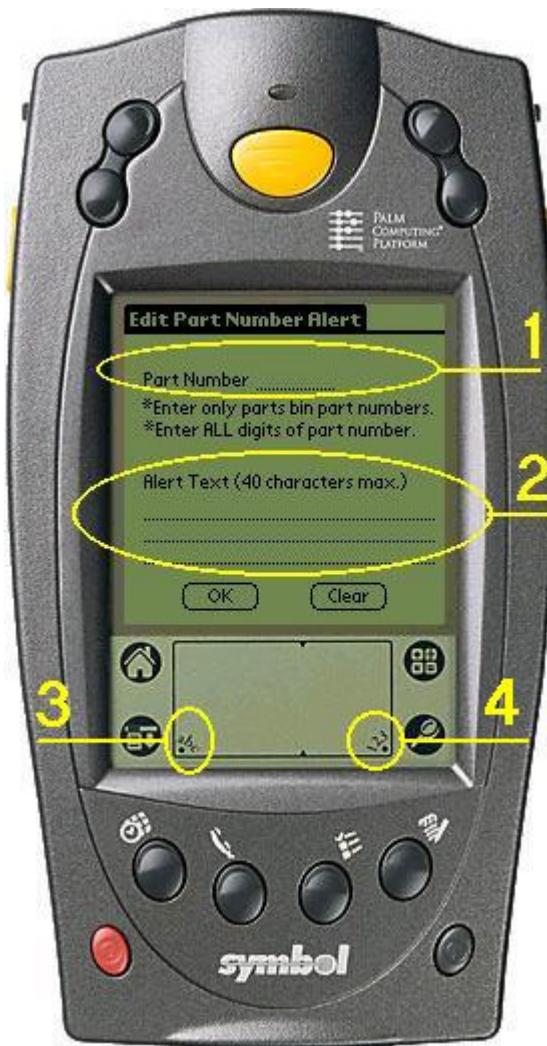




FIGURE 25. KEYBOARD NUMBERS AND LETTERS MENUS

Alerts Setup Completed Menu

The Alerts Setup Completed Menu (see Figure 26), shows 3 parts bin part numbers as being setup to display a pop up box containing the text of your choice when these parts bin numbers are scanned (see Figure 27). The user may edit, add, or delete part numbers from this menu (see item 1, Figure 26).

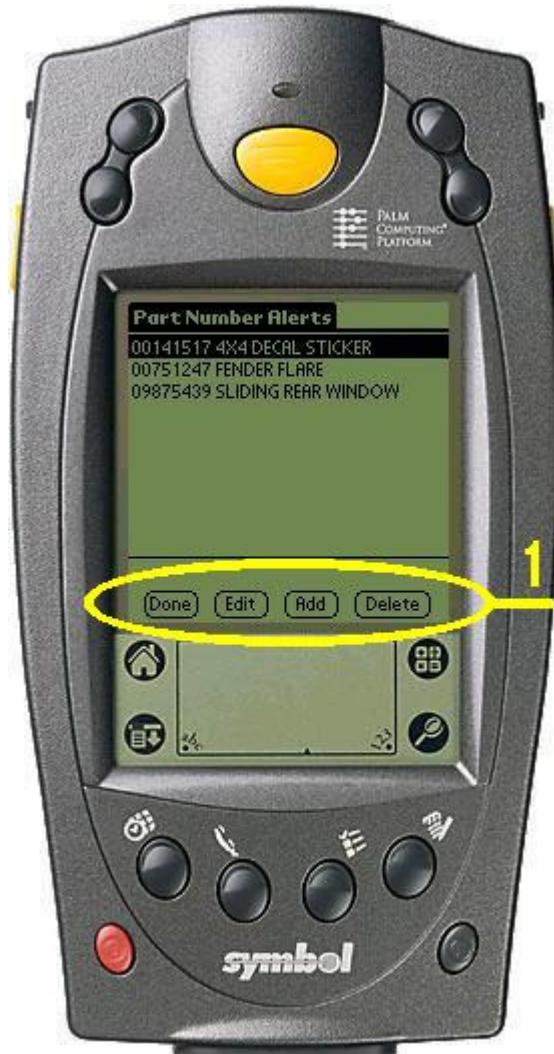


FIGURE 26. ALERTS SETUP COMPLETED MENU

Part Number Alert Box

The Part Number Alert Box (see item 1, Figure 27) appears when a parts bin part number has been set up as an alert. When the number is scanned, the operator will see a box like this containing the text that was entered when the alert was setup. **The Operator MUST tap the OK button with their stylus to continue scanning part numbers.**



FIGURE 27. PART NUMBER ALERT BOX

Is Your EP1 Scanner Ready to Use?

Your EP1 scanner should be ready for use after the following checklist is complete:

- 1.) The unit is fully charged (see figure 2).
- 2.) A mode of operation has been selected and set (see page 11).
- 3.) The new barcode labels have been printed out and match the mode that you have selected.
- 4.) You have successfully taught your EP1 which barcodes it will be error proofing by stepping through the “Pick Ticket Setup” (see page 18) and “Parts Bin Setup” (see page 20) sections of this manual.
- 5.) You have checked and cleared out all counters if necessary (see page 22).

You are now ready to scan your first Pick Ticket and Parts bin (material label) barcodes. Remember that the pick ticket can be scanned before the parts bin barcode, or the parts bin can be scanned before the pick ticket, the order doesn't matter. The EP1 is looking for pairs of barcodes.

Scanning Barcodes for the First Time

The easiest way to scan barcode labels is to point the scanner at the barcode you wish to scan and hold one of the 3 yellow scan buttons down (see figure 1, the optional pistol grip has a yellow scan (trigger) button on the pistol grip). If you are scanning 2D barcodes remember to work the scanner from top to bottom or bottom to top (it does not matter which way) covering 1 inch per second until you hear a beep and/or see a green light led just above the middle yellow scan button. If you need to refresh your memory on how to scan labels refer to figures 10 & 11.

Troubleshooting

Symptom	Possible Causes and remedies
EP1 terminal does not turn on:	<ul style="list-style-type: none">• Adjust the contrast control.• Make sure the battery is fully charged & installed properly.• Replace the battery. If your EP1 unit still does not turn on try a soft reset (refer to your SPT 1700 Series Manual)
Low battery warning after Replacing the battery:	<ul style="list-style-type: none">• The battery warning message may appear immediately after replacing the battery. In addition, if you check the battery gauge in the Applications Launcher immediately after replacing the battery, the gauge may start at “empty” and slowly rise to “full.” This is normal. It takes a minute for the battery gauge to accurately show the condition of the battery.
No sound:	<ul style="list-style-type: none">• Check the sound options in the General Preferences screen. If the option is set to off, there will be no sound. See the SPT 1700 Series Manual for more information.
EP1 terminal shuts itself off:	<ul style="list-style-type: none">• Your EP1 terminal is designed to turn itself off after a period of inactivity. This period can be set at one minute, two minutes, or three minutes. Check the “Auto-off after” setting in the General Preferences screen, and change the setting if you need a longer delay before the automatic shutoff feature activates. See the SPT 1700 Series Manual for more information. The terminal also turns itself off when the battery power is extremely low.
EP1 terminal doesn't recognize My handwriting:	<ul style="list-style-type: none">• For your EP1 to recognize handwriting input with the stylus, you need to use the Graffiti character strokes. See the SPT 1700 Series Manual for more information on how to write Graffiti character strokes.• Make the Graffiti character strokes in the Graffiti writing area, not on the display part of the screen.

**EP1 terminal doesn't recognize
My handwriting Continued:**

- Make sure you are writing the strokes for letters in the left-hand side, and the strokes for numbers in the right-hand side of the Graffiti writing area.
 - Make sure that Graffiti is not shifted into extended or punctuation modes. See the SPT 1700 Series Manual for more information about shifting into and out of punctuation modes.
-

**Tapping the screen buttons or icons
does not activate the corresponding
feature:**

- Recalibrate the digitizer. Choose Digitizer from the preferences application pick list and follow the directions on the screen. See the SPT 1700 Series Manual for more information on how to access the Preferences application.
-

**When I tap the icon,
nothing happens:**



- Not all applications have menus. Try changing to a different application.
-

Beamed data does not transmit:

- Confirm that the EP1 terminals are 5" apart, the receiver has its IrDA capability enabled, and that the path between two devices is clear of obstacles.
Note: You cannot overwrite a .prc file via IrDA if it is locked.
-

**When receiving beamed data an out of
Memory message appears:**

- Your EP1 terminal requires at least twice the amount of memory available as the data you are receiving. For example, if you are receiving a 30k file, you must have at least 60k free.
-

**Your EP1 unit does not read
A barcode:**

- Is the EP1 having trouble reading only 1 or 2 barcode types? Check several labels.
- Verify that the setup is correct.

**Your EP1 unit does not read
A barcode continued:**

- Check to make sure the bar code label is not defaced.
- If the problem is with a Pick Ticket label only, the most common problem is the printer not printing the bars correctly.
- Be sure you are within proper scanning range
- Be sure the unit is programmed to accept the type of barcode you are scanning.
- If you are expecting a beep on a good decode and don't hear one, check to see that the application is set to generate a beep on a good decode.
- If the scanner stops emitting a laser beam when you press the trigger, check your battery level. When the battery is low, the scanner shuts off before the terminal notifies you of the low battery condition.

Note: If, after performing these checks, the scanner is still not reading symbols, contact your distributor or Symbol Technologies.

Index

A

Alerts Menu.....	32
Alerts Options Menu	31
Alerts Setup Completed Menu	35

C

Counter Errors	27
Counter Explanations	24
Counters Menu	23
Counters Selection.....	22

D

Dual JSON	13
------------------------	----

E

Edit Part Number Alert Menu	33
EP1 Application Startup.....	8

G

Getting Started.....	4
----------------------	---

H

History Options Menu.....	28
How to charge your EP1	6

I

Installation/Setup of the EP1	7
Introduction	4
Is Your EP1 Scanner Ready to Use?	37

J

Job Sequence Number	12
JSON Counter Menu	25
JSON History Display.....	30
JSON History Menu	29
JSON/Part Number	12

M

Mode Menu	11, 14
Mode Selection.....	10

O

Options Button	9
Options Menu.....	9
Overview of your new EP1	5

P

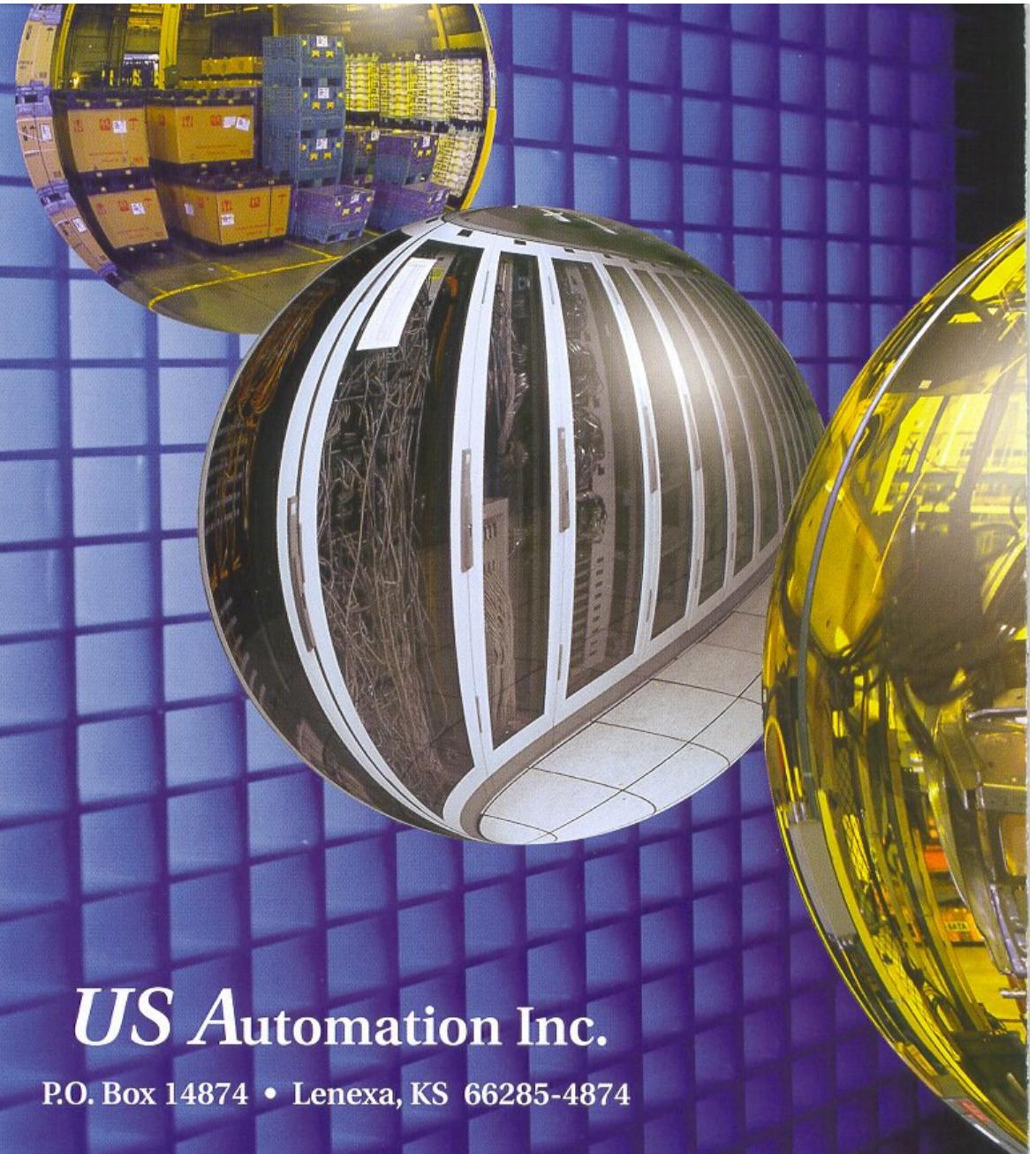
Part # Parts Bin Barcode Example	15
Part # Pick Ticket Barcode Example.....	15
Part Number Alert Box	36
Part Number mode	11
Parts Bin Setup	20
Parts Bin Setup Menu.....	21
Pick Ticket / Parts Bin Counter Menu	24
Pick Ticket Setup	18
Pick Ticket Setup Menu	19
Pick Ticket/Parts Bin & JSON (Dual option) Counter Menus.....	26
Pick Ticket/Parts Bin Counter Menu	23

S

scan a 1-D Barcode Label	16
scan a 2-D Barcode Label	17
Scanning 1-D Bar Codes with the EP1	16
Scanning Barcodes for the First Time.....	37
Scanning PDF417 (2-D) Bar Codes	17

T

Table of Contents	2
Table of Figures	3
To insert the EP1 into the trigger handle	7
To Remove the EP1 from the trigger handle	7
TRG3000 Trigger Handle	7
Troubleshooting	38



US Automation Inc.

P.O. Box 14874 • Lenexa, KS 66285-4874

Phone (913) 894-2410

Fax (913) 894-2928

E-Mail: contact@us-automation.com
<http://www.us-automation.com>